



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**D4931-3**

**Job Sheet 202248**



**Part No:** D4931-3

**Job Qty:** 12 pcs

**Part Name:** Engine Fitting (For B3 Models)



**Part Weight:** 0 lbs

**Status:** New

**Priority:** Medium

**Job Created:** 10/22/19

**Job Tracking No:**

**Due Date:** 11/6/19

**Created By:** Marie Lajeunesse

**Type:** SOLD

**Description:**

**Note:** DWG REV A SHEET 2 IPP REV:A NEW ISSUE 13-09-16 JLM VERIFIED BY:DD

**Ship Via:**

### Bill of Materials

### Job Routing

| Op No | Operation  | Qty    | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off  |
|-------|------------|--------|------------|----------|-----------|---------|-----------------------|-----------|-----------|
|       |            |        |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |           |
| 100   | Doosan - 1 | 12 pcs | 11/6/19    | 11/6/19  | 1.00      | 11.88   | Doosan - 1            |           | <i>DL</i> |
| 110   | QC 2       | 12 pcs | 11/6/19    | 11/6/19  | 0.00      | 0.00    | QC 2 - 1              |           |           |
|       |            |        |            |          |           |         | QC 2 - 12             |           |           |
|       |            |        |            |          |           |         | QC 2 - 14             |           |           |
|       |            |        |            |          |           |         | QC 2 - 17             |           |           |
|       |            |        |            |          |           |         | QC 2 - 19             |           |           |
|       |            |        |            |          |           |         | QC 2 - 2              |           |           |
|       |            |        |            |          |           |         | QC 2 - 20             |           |           |
|       |            |        |            |          |           |         | QC 2 - 22             |           |           |
|       |            |        |            |          |           |         | QC 2 - 23             |           |           |
|       |            |        |            |          |           |         | QC 2 - 25             |           |           |
|       |            |        |            |          |           |         | QC 2 - 32             |           |           |
|       |            |        |            |          |           |         | QC 2 - 33             |           |           |
|       |            |        |            |          |           |         | QC 2 - 35             |           |           |
|       |            |        |            |          |           |         | QC 2 - 39             |           |           |
|       |            |        |            |          |           |         | QC 2 - 4              |           |           |
|       |            |        |            |          |           |         | QC 2 - 40             |           |           |
|       |            |        |            |          |           |         | QC 2 - 44             |           |           |
|       |            |        |            |          |           |         | QC 2 - 45             |           |           |
|       |            |        |            |          |           |         | QC 2 - 48             |           |           |
|       |            |        |            |          |           |         | QC 2 - 49             |           |           |
|       |            |        |            |          |           |         | QC 2 - 50             |           |           |
|       |            |        |            |          |           |         | QC 2 - 51             |           |           |
|       |            |        |            |          |           |         | QC 2 - 52             |           |           |
|       |            |        |            |          |           |         | QC 2 - 57             |           |           |
|       |            |        |            |          |           |         | QC 2 - 62             |           |           |
|       |            |        |            |          |           |         | QC 2 - 63             |           |           |
|       |            |        |            |          |           |         | QC 2 - 8              |           |           |
|       |            |        |            |          |           |         | QC 2 - 66             |           |           |
|       |            |        |            |          |           |         | QC 2 - 64             |           |           |



**Container No:** S229072



**Part:** D4931-3

**Job No:** 202248

**Serial No/Batch:** S229072

**Revision:**

**Inspector:**

**Exp Date:**

**Instructions:** Various STC's

**Date:** 11/01/19

|     |                             |           |         |           |                             |             |
|-----|-----------------------------|-----------|---------|-----------|-----------------------------|-------------|
|     |                             |           |         |           | QC 2 - 65                   |             |
|     |                             |           |         |           | QC 2 - 5                    |             |
|     |                             |           |         |           | QC 2 - 71                   |             |
|     |                             |           |         |           | QC 2 - 73                   |             |
|     |                             |           |         |           | QC 2 - 69                   |             |
| 112 | Conventional Mill - 1 - B4B | 12<br>pcs | 11/6/19 | 0.00 4.58 | Conventional Mill - 1 - B4B | 11/19/11/4  |
|     |                             |           |         |           | Conventional Mill - 2 - B4B |             |
| 115 | QC 2                        | 12<br>pcs | 11/6/19 | 0.00 0.00 | QC 2 - 1                    |             |
|     |                             |           |         |           | QC 2 - 12                   |             |
|     |                             |           |         |           | QC 2 - 14                   |             |
|     |                             |           |         |           | QC 2 - 17                   |             |
|     |                             |           |         |           | QC 2 - 19                   |             |
|     |                             |           |         |           | QC 2 - 2                    |             |
|     |                             |           |         |           | QC 2 - 20                   |             |
|     |                             |           |         |           | QC 2 - 22                   |             |
|     |                             |           |         |           | QC 2 - 23                   |             |
|     |                             |           |         |           | QC 2 - 25                   |             |
|     |                             |           |         |           | QC 2 - 32                   |             |
|     |                             |           |         |           | QC 2 - 33                   |             |
|     |                             |           |         |           | QC 2 - 35                   |             |
|     |                             |           |         |           | QC 2 - 39                   |             |
|     |                             |           |         |           | QC 2 - 4                    |             |
|     |                             |           |         |           | QC 2 - 40                   |             |
|     |                             |           |         |           | QC 2 - 44                   |             |
|     |                             |           |         |           | QC 2 - 45                   |             |
|     |                             |           |         |           | QC 2 - 48                   |             |
|     |                             |           |         |           | QC 2 - 49                   |             |
|     |                             |           |         |           | QC 2 - 50                   |             |
|     |                             |           |         |           | QC 2 - 51                   |             |
|     |                             |           |         |           | QC 2 - 52                   |             |
|     |                             |           |         |           | QC 2 - 57                   |             |
|     |                             |           |         |           | QC 2 - 62                   |             |
|     |                             |           |         |           | QC 2 - 63                   | 11/19/11/4  |
|     |                             |           |         |           | QC 2 - 8                    |             |
|     |                             |           |         |           | QC 2 - 66                   |             |
|     |                             |           |         |           | QC 2 - 64                   |             |
|     |                             |           |         |           | QC 2 - 65                   |             |
|     |                             |           |         |           | QC 2 - 5                    |             |
|     |                             |           |         |           | QC 2 - 71                   |             |
|     |                             |           |         |           | QC 2 - 73                   |             |
|     |                             |           |         |           | QC 2 - 69                   |             |
| 120 | QC 8                        | 12<br>pcs | 11/6/19 | 0.00 0.00 | QC 8 - 12                   | on 11/11/04 |
|     |                             |           |         |           | QC 8 - 14                   |             |
|     |                             |           |         |           | QC 8 - 17                   |             |
|     |                             |           |         |           | QC 8 - 20                   |             |
|     |                             |           |         |           | QC 8 - 25                   |             |
|     |                             |           |         |           | QC 8 - 3                    |             |
|     |                             |           |         |           | QC 8 - 32                   |             |
|     |                             |           |         |           | QC 8 - 33                   |             |
|     |                             |           |         |           | QC 8 - 35                   |             |
|     |                             |           |         |           | QC 8 - 39                   |             |
|     |                             |           |         |           | QC 8 - 4                    |             |
|     |                             |           |         |           | QC 8 - 44                   |             |
|     |                             |           |         |           | QC 8 - 45                   |             |
|     |                             |           |         |           | QC 8 - 49                   |             |
|     |                             |           |         |           | QC 8 - 58                   |             |
|     |                             |           |         |           | QC 8 - 8                    |             |

|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           |                               |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------|---------|-----------|-------------------------------|-------------|
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 9                      |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 68                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 67                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 1 (A)                  |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 47                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 40                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 52                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 23                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 57                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 76                     |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 8 - 61                     |             |
| 130                                                                                                                                                                                                                                                                                                                                                                                             | Packaging 3-2 - Stock - B4B | 12 pcs | 11/6/19 | 0.00 0.00 | Packaging 3 - 1 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 2 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 3 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 4 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 5 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 6 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 7 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 8 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 9 - B4B         |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 10 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 11 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 12 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 13 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 14 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 15 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 16 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 17 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 18 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 19 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 20 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 21 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 22 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 23 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 24 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 25 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 26 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 27 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 28 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 29 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 30 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 31 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | <b>Packaging 3 - 32 - B4B</b> |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 33 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 34 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 35 - B4B        |             |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | Packaging 3 - 36 - B4B        |             |
| 140                                                                                                                                                                                                                                                                                                                                                                                             | QC 21 - SA                  | 12 pcs | 11/6/19 | 0.00 0.00 | QC 21 - SA - 21               | NOV 08 2019 |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 21 - SA - 70               | NOV 08 2019 |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |        |         |           | QC 21 - SA - 53               | NOV 08 2019 |
| Part Op 100 - Doosan Lathe)Machine as per folio FB210<br>Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB)<br>112 - (Manufacture as per dwg)DRILL HOLES AS PER REQUIRED<br>115 - (QC2- Inspect parts off machine FAI/FAIB)<br>120 - (QC8- Inspect parts - second check)<br>130 - (Identify as per dwg & Stock Location: _____)<br>140 - (QC21- Final Inspection - Work Order Release |                             |        |         |           |                               |             |

10/22/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

| Job BOM                            |                  |                    |                |            |
|------------------------------------|------------------|--------------------|----------------|------------|
| Part / Item                        | Component Name   | Quantity           | Operation      | Container  |
| M303R2.000                         | 303 Round Bar 2" | 1.8000 ft (.15 ea) | 100-Doosan - 1 | S221909 4' |
| Job Allocations                    |                  |                    |                |            |
| Operation                          | Component Part   | Required           | Inventory      | Allocated  |
| 100-Doosan - 1                     | M303R2.000       | 2                  | 13             | 0          |
| Part Specifications                |                  |                    |                |            |
| Specifications could not be found. |                  |                    |                |            |

Plex 10/22/19 3:19 PM Dart.lajeunesse.marie

2.13"  
Scrap .33"

|                                            |  |                             |  |
|--------------------------------------------|--|-----------------------------|--|
| <b>DART AEROSPACE LTD</b>                  |  | <b>Work Order:</b> 202248   |  |
| <b>Description:</b> EAPS P2 Engine Fitting |  | <b>Part Number:</b> D4931-3 |  |
| <b>Inspection Dwg:</b> D4931 <b>Rev:</b> A |  | <b>Page 1 of 1</b>          |  |

### FIRST ARTICLE INSPECTION CHECKLIST

| Drawing Dimension | Tolerance                  | Actual Dimension | Accept | Reject | Method of Inspection | Comments  |
|-------------------|----------------------------|------------------|--------|--------|----------------------|-----------|
| 1-1/16-12 UN 2A   | Maj: 1.0608<br>Min: 1.0494 | 1.0585           | ✓      |        | micrometer           | DCH-2     |
| M.O.W.            | Maj: 1.0995<br>Min: 1.0938 | 1.096            | ✓      |        | micrometer           | wire .001 |
| 0.13 x 45°        | +/-0.030 x +/-0.5°         | .13 x 45°        | ✓      |        | caliper              |           |
| Ø0.063            | +0.004/-0.001              | .067             | ✓      |        | caliper              | Spec 31   |
| 0.08              | +/-0.030                   | .08              | ✓      |        | caliper              |           |
| 0.906             | +/-0.010                   | .912             | ✓      |        | caliper              |           |
| 0.13              | +/-0.030                   | .133             | ✓      |        | caliper              |           |
| 0.25              | +/-0.030                   | .249             | ✓      |        | caliper              |           |
| 0.938             | +/-0.010                   | .936             | ✓      |        | micrometer           | DCH-01    |
| 1.927             | +/-0.010                   | 1.928            | ✓      |        | caliper              |           |
| 0.250             | +/-0.010                   | .25              | ✓      |        | caliper              |           |
| 0.424             | +/-0.010                   | .429             | ✓      |        | caliper              |           |
| 0.315             | +/-0.010                   | .31              | ✓      |        | caliper              |           |
| 0.185             | +/-0.010                   | .184             | ✓      |        | caliper              |           |
| 37°               | +/-0.5°                    | 37°              | ✓      |        | Protractor           |           |
| 0.33              | +/-0.030                   | .342             | ✓      |        | caliper              |           |
| 34°               | +/-0.5°                    | 34.2°            | ✓      |        | Protractor           |           |
| 0.532             | +/-0.010                   | 0.532            | ✓      |        | Vernier JVS          |           |
| 1.063             | +/-0.010                   | 1.060            | ✓      |        | caliper              |           |
| 0.594             | +/-0.010                   | 0.594            | ✓      |        | Vernier JVS          |           |
| 0.791             | +/-0.010                   | .789             | ✓      |        | caliper              |           |
| 1.188             | +/-0.010                   | 1.188            | ✓      |        | Vernier JVS          |           |
| 1.582             | +/-0.010                   | 1.582            | ✓      |        | caliper              |           |
|                   |                            |                  |        |        |                      |           |
|                   |                            |                  |        |        |                      |           |
|                   |                            |                  |        |        |                      |           |
|                   |                            |                  |        |        |                      |           |

|                                 |                                |                              |
|---------------------------------|--------------------------------|------------------------------|
| <b>Measured by:</b> [Signature] | <b>Audited by:</b> [Signature] | <b>Preliminary Approval:</b> |
| <b>Date:</b> 9/11/04            | <b>Date:</b> 19/11/04          | <b>Date:</b>                 |
| <b>Rev</b>                      | <b>Date</b>                    | <b>Change</b>                |
| A                               | 14.06.24                       | New Issue                    |
| <b>Revised by:</b> KJ           |                                | <b>Approved:</b> [Signature] |

Entered: \_\_\_\_\_ Date: \_\_\_\_\_ **WORK ORDER NON-CONFORMANCE / ROUTE UPDATE**

Route update only

NCR No. \_\_\_\_\_

Job: \_\_\_\_\_

Part No. \_\_\_\_\_

### DISPOSITION

Rework ☐  
Scrap ☐  
Use-as-is ☐

### DEPARTMENT/PROCESS

Skid-tube ☐  
Machining ☐  
Large Fab ☐  
Cross tube ☐  
Small Fab ☐  
Finishing ☐  
Eng. (Non-AW) ☐  
Prod. Eng. Coord. ☐  
Rec/Store/Packaging ☐  
Engineering ☐  
Water Jet ☐  
Supplier ☐  
Quality ☐

MRB (QSI042)

QTY Affected: \_\_\_\_\_

Sequence #: \_\_\_\_\_

Date: \_\_\_\_\_

### Disposition

Description Work Order Deviation

Completed By

Lead hand / Supervisor

QC / QA Coordinator

### FAULT CATEGORY

Pressure/Forced ☐  
Bending ☐  
Crushing ☐  
Cracks ☐  
Crimp/Kink/Ripple/Wave/Twist ☐  
Marks/Chatter ☐  
Mislabeled ☐  
Contamination ☐  
Misaligned/off center ☐  
BOM/Route ☐  
Broken/Damage/Defect ☐  
Incomplete/Unclear Instructions ☐  
Drill Holes ☐  
Fit/Function ☐  
Power Loss/Surge ☐  
Folio/Program ☐  
Grain Direction ☐  
Weld ☐  
Wrong Stock Pulled ☐  
Out of Sequence ☐  
Off-set/Set-up ☐

Positioned Wrong ☐  
Outside Tolerance ☐  
Drawing ☐  
Finish ☐  
Part Lost/Missing ☐  
Misread ☐

### Root Cause

Operator ☐  
Manufacturing Process ☐  
Equip/Tooling ☐  
Handling/Preservation ☐  
Material ☐  
Product Improvement ☐  
Process Improvement ☐  
Human Factors ☐

Other/Details: